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AMENDMENTS TO THE CLAIMS:

29. (Currently Amended) A method for delivering cooling water to a power plant having condensers, the proper functioning of which require cooling, said method comprising the steps of:

(i) extending a first pipe group of an open loop geothermal heat exchange system comprising at least one first pipe having a proximal end and a distal end substantially horizontally under the bottom of a water reservoir for a first predetermined distance from the shore of said water reservoir and for a first predetermined depth under the bottom of said water reservoir, said bottom constituting a predominantly sandy substrate;

(ii) extending a second pipe group of the open loop geothermal heat exchange system comprising at least one second [first] pipe having a proximal end and a distal end substantially horizontally under said bottom of said water reservoir for a second predetermined distance from the shore of said water reservoir and for a second predetermined depth under said bottom of said water reservoir, said second predetermined distance and depth being different from said first predetermined distance and depth ;

(iii) delivering ground water from under the bottom of said water reservoir to said power plant for cooling said condensers by inducing a low downward velocity gradient over the distances and depths of the first and second pipe groups and creating a negative pressure along the proximal ends of at least one of the first and second pipes sufficient to draw ground water from under the bottom of the water reservoir through said predominantly sandy substrate and into at least one of the first and second pipes through a filtering assembly associated with said first and second pipes and drawing ground water essentially free from planktonic organisms into said at least one of the first and second pipes;

(iv) cooling said condensers with the delivered cooling water; and

(v) discharging the cooling water from said power plant into the water reservoir at temperatures substantially preventing detrimental thermal plumes, wherein heat conduction between the supply and discharge water is prevented by the sandy substrate which acts as a natural thermal barrier.

30. (Previously Presented) The method of claim 29 wherein said first pipe group comprises a plurality of individual pipes of substantially the same length and said second pipe group comprises a plurality of individual pipes of substantially the same length but of a different length than the individual pipes of said first pipe group.

31. (Previously Presented) The method of claim 29 wherein said filtering assembly includes screens.

32. (Previously Presented) The method of claim 29 wherein said water reservoir is a water body selected from the group consisting of an ocean, sea, river, and lake.

33. (Currently Amended) An open loop geothermal heat exchange system comprising a delivery assembly configured to deliver cooling ground water from under the bottom of a water reservoir to a power plant having condensers, the proper functioning of which require cooling, the delivery assembly comprising:

(i) a first pipe group comprising at least one first pipe having a proximal end and a distal end extended substantially horizontally under the bottom of said water reservoir for a first predetermined distance from the shore of said water reservoir and for a first predetermined depth under the bottom of said water reservoir, said bottom constituting a predominantly sandy substrate;

(ii) a second pipe group comprising at least one second [first] pipe having a proximal end and a distal end extended substantially horizontally under the bottom of said water reservoir for a second predetermined distance from the shore of said water reservoir and for a second predetermined depth, under said bottom of said water reservoir, said second predetermined distance and depth being different from said first predetermined distance and depth, wherein a low downward velocity gradient is induced over the distances and depths of the first and second pipe groups;

(iii) a pump assembly in flow communication with the proximal ends of said first and said second pipes and configured to create a negative pressure along the

proximal ends of said first and second pipes sufficient to draw ground water from under the bottom of the water reservoir through said predominantly sandy substrate and into said first and second pipes through a filtering assembly associated with said first and second pipes, and deliver said ground water free from planktonic organisms to said condensers for cooling thereof; and

(iv) means for discharging the delivered ground water to said water reservoir after cooling said condensers without causing detrimental thermal plumes, wherein heat conduction between the supply and discharge water is prevented by the sandy substrate which acts as a natural thermal barrier.

34. (Previously Presented) The cooling water intake system of claim 33, wherein said first pipe group comprises a plurality of individual pipes of substantially the same length and said second pipe group comprises a plurality of individual pipes of substantially the same length but of a different length than the individual pipes of said first pipe group.

35. (Previously Presented) The cooling water intake system of claim 33 wherein said filtering assembly includes screens.

36. (Previously Presented) The cooling water intake system of claim 33 wherein said water reservoir is selected from the group consisting of an ocean, sea, river, and lake.